CIVIL TECH LABS

Accredited by NABL as per ISO/ IEC 17025 : 2005

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027

Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer,
Vidyaranyapura Sub Division,
BBMP.

19th January 2017

Dear Sir,

Sub: Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division. Testing of cubes – Reg.

As requested the 28th day Compressive Strength Test of Cubes was carried out for the above work for the samples supplied by you.

Please find the enclosed Test Report of the above.

Thanking you,

For Civil Tech Labs,

(BASAVARAJ K.)
Executive Director

CIVIL TECH LABS BANGALORE

AE-10

AEE (VRP) SD

Jadhav
AE

CIVIL TECH LABS

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Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.
Name of Agency	Sri. K Shankarreddy
Grade of Concrete	M-15
Location	Covering Slab of Drain
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	CC-Work	150.08 X 150.06 X 150.0	22521	22/12/2016	19/01/2017	28	8.18	362	**16.09**	**16.30**
2		150.05 X 150.08 X 150.0	22520				8.19	368	**16.36**	
3		150.07 X 150.06 X 150.0	22520				8.20	370	**16.44**	

Note:

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3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the customer.

AEE (VRP) BE

CIVIL TECH LABS BANGALORE

(BASAVARAJ K.)
Executive Director

Zaahra
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TEST REPORT

TESTS ON REINFORCEMENT STEEL BAR 10mm

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads & Draims at Hanuman Layout & Ramachandrapura in Ward No. 10 Vidyaranyapura Sub Division.
Name of the Agency	Sri. K. Shankarreddy
Date of Testing	06/12/2016
Grade of Steel	Fe - 500.

Sl.No.	Description	Result	IS 1786-2008 Min. Requirements	Remarks
1	Measured Diameter mm	10	10	Satisfactory
2	Wt/m Length (Kg/m)	0.618	0.617	Satisfactory
3	Bend & RebendTest	Pass	Should not Crack or Fracture	Satisfactory
4	Elongation (%)	15.6	12	Satisfactory
5	Yield Stress(N/Sq.mm)	506	500	Satisfactory
6	U T S (N/Sq.mm)	562	545	Satisfactory

Note:

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3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the client.

(KHUSHBOO L.)
Quality Manager

CIVIL TECH LABS BANGALORE

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5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027

Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer,
Vidyaranyapura Sub Division,
BBMP.

16th January 2017

Dear Sir,

Sub: Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division. Testing of cubes – Reg.

As requested the 28th day Compressive Strength Test of Cubes was carried out for the above work for the samples supplied by you.

Please find the enclosed Test Reports of the above.

Thanking you,

For Civil Tech Labs,

(BASAVARAJ K.)
Executive Director

CIVIL TECH LABS BANGALORE

Jadhav
AE

CIVIL TECH LABS

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Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.
Name of Agency	Sri. K Shankarreddy
Grade of Concrete	M-20
Location	Pavements
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-1	150.04 X 150.08 X 150.0	22518	17/12/2016	14/01/2017	28	8.15	480	**21.33**	**21.63**
2		150.08 X 150.06 X 150.0	22521				8.16	485	**21.56**	
3		150.05 X 150.07 X 150.0	22518				8.19	495	**22.00**	

Note:

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(BASAVARAJ K.)
Executive Director

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.
Name of Agency	Sri. K Shankarreddy
Grade of Concrete	M-20
Location	Pavements
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-2	150.03 X 150.05 X 150.0	22512	17/12/2016	14/01/2017	28	8.16	485	**21.56**	**22.00**
2		150.08 X 150.06 X 150.0	22521				8.17	495	**22.00**	
3		150.07 X 150.08 X 150.0	22523				8.18	505	**22.44**	

Note:

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(BASAVARAJ K.)
Executive Director

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.
Name of Agency	Sri. K Shankarreddy
Grade of Concrete	M-20
Location	Pavements
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-3	150.05 X 150.06 X 150.0	22517	17/12/2016	14/01/2017	28	8.19	485	**21.56**	**21.78**
2		150.03 X 150.05 X 150.0	22512				8.20	490	**21.78**	
3		150.06 X 150.04 X 150.0	22515				8.21	495	**22.00**	

Note:

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Executive Director

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.
Name of Agency	Sri. K Shankarreddy
Grade of Concrete	M-20
Location	Pavements
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-1	150.04 X 150.05 X 150.0	22514	14/12/2016	11/01/2017	28	8.18	485	**21.56**	**21.85**
2		150.08 X 150.05 X 150.0	22520				8.19	490	**21.78**	
3		150.07 X 150.04 X 150.0	22517				8.21	500	**22.22**	

Note:

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4. The results are based on the test conducted on samples supplied by the customer.

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.
Name of Agency	Sri. K Shankarreddy
Grade of Concrete	M-20
Location	Pavements
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-2	150.07 X 150.08 X 150.0	22523	14/12/2016	11/01/2017	28	8.17	495	**22.00**	**22.30**
2		150.05 X 150.06 X 150.0	22517				8.19	500	**22.22**	
3		150.04 X 150.04 X 150.0	22512				8.22	510	**22.67**	

Note:

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Executive Director

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.
Name of Agency	Sri. K Shankarreddy
Grade of Concrete	M-20
Location	Pavements
No. of cubes tested	3
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	ID	Dimension of specimen (mm)	Cross sectional area (mm^2)	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm^2)	Avg Compressive Strength (N/mm^2)
1	Sample-3	150.04 X 150.05 X 150.0	22514	14/12/2016	11/01/2017	28	8.19	490	**21.78**	**22.15**
2		150.05 X 150.02 X 150.0	22511				8.20	500	**22.22**	
3		150.03 X 150.03 X 150.0	22509				8.23	505	**22.44**	

Note:

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4. The results are based on the test conducted on samples supplied by the customer.

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(BASAVARAJ K.)
Executive Director

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T-2654

To,

Assistant Executive Engineer,
Vidyaranyapura Sub Division,
BBMP.

06th December 2016

Dear Sir,

Sub: Testing of Materials.

As requested, tests on physical properties were carried out for the Materials supplied by you, for the work of **'Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.'**

Please find the enclosed Test Reports of the above.

Thanking You,
For Civil Tech Labs

(BASAVARAJ K.)
Executive Director

CIVIL TECH LABS BANGALORE

AEE (VRP) SD

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TEST REPORT

GRADATION TEST ON COARSE AGGREGATES 40mm ↓ Graded

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.
Name of Agency	Sri. K Shankarreddy
Date of Testing	06/12/2016
Specific Gravity	**2.68**
Water Absorption	**0.29%**
Technical Reference	IS : 2386(Part I)–1963 (Reaffirmed 2011), IS : 2386 (Part III)–1963 (Reaffirmed 2011)

IS Sieve Designation (mm)	**Sieve Analysis (% Passing IS Sieve)**	**Grading Requirement as per IS:383-1970 (Reaffirmed 2011)**	**Remarks**
80	**100**	100	**Satisfies the requirement**
40	**97.4**	95-100	
20	**54.6**	30-70	
10	**24.3**	10-35	
4.75	**4.2**	0-5	

Note:

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(BASAVARAJ K.)
Executive Director

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TEST REPORT

GRADATION TEST ON FINE AGGREGATES

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.
Name of Agency	Sri. K Shankarreddy
Date of Testing	06/12/2016
Specific Gravity	**2.57**
Technical Reference	IS : 2386(Part I)–1963 (Reaffirmed 2011), IS : 2386 (Part III)–1963 (Reaffirmed 2011)

Sample	IS Sieve designation (mm)	Sieve Analysis (% Passing IS Sieve)	Grading Requirement as per IS:383-1970 (Reaffirmed 2011)				Grading Zone	Remarks
			ZONE-I	ZONE-II	ZONE-III	ZONE-IV		
River Sand	10	**100**	100	100	100	100	II	Satisfies the requirement
	4.75	**98.4**	90-100	90-100	90-100	95-100		
	2.36	**85.6**	60-95	75-100	85-100	95-100		
	1.18	**74.3**	30-70	55-90	75-100	90-100		
	0.6	**48.5**	15-34	35-59	60-79	80-100		
	0.3	**24.6**	5-20	8-30	12-40	15-50		
	0.15	**7.3**	0-10	0-10	0-10	0-15		

Note:

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4. The results are based on the test conducted on samples supplied by the customer.

CIVIL TECH LABS BANGALORE

(BASAVARAJ K.)
Executive Director

Jadhao
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TEST REPORT

TEST ON CEMENT

Name & Address of the Customer	AEE, Vidyaranyapura Sub Division, BBMP.
Name of Work	Improvements to Roads and Drains at Hanuman layout and Ramachandrapura in ward no. 10, Vidyaranyapura Sub Division.
Name of the Agency	Sri. K Shankarreddy
Date of Testing	06/12/2016

Tests	**Test Method As Per IS & Apparatus**		**Results**		**Requirements As Per IS 8112:1989**	**Remarks**
	IS Code	**Method**	**Value**	**Unit**		
Initial Setting Time	**IS-4031 (Part-5) 1988**	VICAT	50	min	Not Less Than 30 Minutes	Satisfies Requirement
Final Setting Time	**IS-4031 (Part-5) 1988**	VICAT	488	min	Not More Than 600 Minutes	Satisfies Requirement
Soundness	**IS-4031 (Part-3) 1988**	LE-CHATELIER	4	mm	Not More Than 10 mm	Satisfies Requirement

Note:

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4.The results are based on the test conducted on samples supplied by the customer.

CIVIL TECH LABS BANGALORE

(BASAVARAJ K.)
Executive Director

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